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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,311	04/06/2001	Uri Tasch	50323-017	4152

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EXAMINER

SZMAL, BRIAN SCOTT

ART UNIT	PAPER NUMBER
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3736

DATE MAILED: 12/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,311

Applicant(s)

TASCH ET AL.

Examiner

Brian Szmaj

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-96 is/are pending in the application.
- 4a) Of the above claim(s) 10-30,33-57,59,60,63-90 and 92-96 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9,31,32,58,61,62 and 91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. Claims 10-30, 33-57, 59, 60, 63-90 and 92-96 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 31 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 31 and 32 recite the limitation "the speed sensing device" in line 5 of the claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(f) he did not himself invent the subject matter sought to be patented.

6. Claims 1-7, 58, 61, 62 and 91 are rejected under 35 U.S.C. 102(a) as being anticipated by Rajkondawar.

Rajkondawar discloses a development of reaction force detection system that detects lameness in cattle and further discloses a first plate; a second plate; a first plurality of load cells, each of the load cells configured to detect an applied force to the first plate; a second plurality of load cells, each of the load cells configured to detect an applied force to the second plate; a processor to execute at least one force analysis instruction set; the force analysis instruction set receives the signals output from the first and second plurality of load cells, in combination with the processor, a magnitude and location of a force applied to either of the first and second plate; the force analysis set receives the signals output from the first and second plurality of load cells, in combination with the processor, a magnitude and location of a force applied to both the first and second plate; the length of the first plate and the second plate is greater than the length of travel of the animal's limb and the limb contacts the plate at least once; the length of the first plate and the second plate is greater than the length of travel of the animal's limb and the limb contacts the plate more than once; the length of each of the first plate and the second plate is between about 150-500 cm; and the width of the first plate and the second plate is between 50-150 cm; the length of the first plate and the second plate is greater than 150 cm; the first plate and the second plate are recessed in a floor; guiding the animal across in instrumented force-sensing floor comprising a left floor plate and a right floor plate, a plurality of load cells for measuring the force applied to the left and right plates; constraining at least one of the animal's body movement and leg movement

so the animal's left limbs contact the left plate and the right limbs contact the right plate; calculating the forces applied to the left plate and the right plate by summing the output signals of the plates; comparing the calculated forces to determine the condition of the gait; computing a position of force along at least one of the X-axis, Y-axis and the Z-axis by summing moments and forces along the respective axes to solve multiple equations; computing a position of the force applied to the first and the second floor plate as a function of time. See whole document.

7. Claims 1-7, 58, 61, 62 and 91 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. Rajkondawar is not listed as an inventor of the current invention, even though a majority of the current application appears to come from his scientific paper. Furthermore, Neerchal and Dyer are not listed as inventors of the current invention even though these two other people assisted Rajkondawar with the research.

8. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Roost. Roost discloses a means for investigating the gait of a living being and further discloses a first plate (3); a second plate (3); a first plurality of load cells (7), each of the load cells configured to detect an applied force to the first plate; a second plurality of load cells, each of the load cells configured to detect an applied force to the second plate; a processor to execute at least one force analysis instruction set; the force analysis instruction set receives the signals output from the first and second plurality of load cells, in combination with the processor, a magnitude and location of a force applied to either of the first and second plate; the force analysis set receives the signals output

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from the first and second plurality of load cells, in combination with the processor, a magnitude and location of a force applied to both the first and second plate; the length of the first plate and the second plate is greater than the length of travel of the animal's limb and the limb contacts the plate at least once; the length of the first plate and the second plate is greater than the length of travel of the animal's limb and the limb contacts the plate more than once; the length of each of the first plate and the second plate is between about 150-500 cm; and the width of the first plate and the second plate is between 50-150 cm; the length of the first plate and the second plate is greater than 150 cm; and the first plate and the second plate are recessed in a floor. See Column 8, lines 59-68; Column 9, lines 1-29; Column 14, lines 26-41.

9. Claims 58, 61, 62 and 91 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuchiya et al.

Tsuchiya et al discloses an apparatus for analyzing the gait of a person and further discloses guiding the animal across in instrumented force-sensing floor comprising a left floor plate and a right floor plate, a plurality of load cells for measuring the force applied to the left and right plates; constraining at least one of the animal's body movement and leg movement so the animal's left limbs contact the left plate and the right limbs contact the right plate; calculating the forces applied to the left plate and the right plate by summing the output signals of the plates; comparing the calculated forces to determine the condition of the gait; computing a position of force along at least one of the X-axis, Y-axis and the Z-axis by summing moments and forces along the respective axes to solve multiple equations; computing a position of the force applied to the first and the

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second floor plate as a function of time. See Column 2, lines 15-33; Column 3, lines 27-68; Column 4; and Column 5, lines 55-63.

Even though Tsuchiya et al disclose means designed for a human, it is disclosed in Column 5, lines 55-63 that the system can be adapted for various applications, which would cover the use of the system to measure the gait of an animal passing through the system.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roost as applied to claim 3 above, and further in view of Tsuchiya et al.

Roost, as discussed above, discloses a means for gait analysis, but fail to disclose the use of a step-up and a ramp down; a railing disposed on either side of the force analysis ramp; a divider disposed between the first and second plate.

Tsuchiya et al, as discussed above, disclose means for gait analysis and further disclose a step-up and a ramp down; a railing disposed on either side of the force analysis ramp; a divider disposed between the first and second plate. See Figures 1 and 2.

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Since both Roost and Tsuchiya et al disclose means for gait analysis, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the means of Roost to include the use of a step-up and a ramp down and a railing, as per the teachings of Tsuchiya et al, since it would provide a means of accurately measuring the force applied to the plate during each step.


Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art also pertains to gait analysis but fail to disclose detecting lameness in animals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Szmalec whose telephone number is (703) 308-3737 and group fax number is (703) 308-0758. The examiner can normally be reached on Monday-Friday, with second Fridays off.

BS

December 3, 2002


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